



**DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES**

Memphis Environmental Field Office

8383 Wolf Lake Drive

Bartlett, TN 38133

Phone 901-371-3000 Statewide 1-888-891-8332 Fax 901-371-3170

December 21, 2015

Laura Adams
Executive Director
Shelby Farms Park Conservancy
500 North Pine Lake Drive
Memphis, TN 38134

Re: Shelby Farms Park, Heart of the Park - TN0081663
 500 North Pine Lake Drive
 Memphis, Shelby County

Dear Ms. Adams:

On December 11, 2015, personnel from the Tennessee Department of Environment and Conversation, Division of Water Resources, conducted an inspection of the Shelby Farms Park, Heart of the Park construction site. Jason Acuff with Scott Contractors and Matt Perry with Montgomery Martin were present during the inspection. The purpose of the inspection was to determine compliance with the *Tennessee Individual Construction Permit* TN0081663 and the *Tennessee Water Quality Control Act*. A copy of the photo document and the Compliance Inspection Report are enclosed for your reference. The following observations were made while on-site:

- Water from the Lot 10 sediment basin was being reused as irrigation water for part of the 83 ac. drainage area associated with the basin. Reusing detained stormwater in this manner is a great way to reduce the volume of water to be treated in the sediment basin and is a sustainable approach to provide favorable conditions for stabilization with vegetation.
- Polyacrylamide (PAM) was being used to aid in the sedimentation of sediment contained in the discharged stormwater from the sediment basins. PAM had been applied directly to a rock check dam downgradient of the Lot 10 sediment basin outlet near outfall SW8. PAM was also applied directly into the channel at two locations near outfall SW9. Please note that this method of application is prohibited in the *TN Erosion Prevention and Sediment Control Handbook* as it increases the potential of discharging chemical flocculant off-site, which could impact waters of the state and promotes settling of sediment off-site, which is not acceptable. Areas where PAM is applied must drain to a sediment basin or trap for final settling prior to discharging from the site.

- Rills and gullies had formed in numerous locations around the construction site, specifically in drainage areas along Farm Road and are in need of temporary or permanent stabilization measures. Water velocity needs to be reduced so that rill and gully formation is prevented.
- Although a large portion of the site was stabilized or in the process of becoming stabilized, numerous areas around the construction site that appeared to be inactive needed to be stabilized. Specifically, the drainage areas along Farm Road and the banks of the sediment basins (Photo 1). Measures to stabilize the site should be initiated as soon as possible. Temporary or permanent soil stabilization at the construction site must be completed no later than 14 days after the construction activity at that portion of the site has temporarily or permanently ceased (7 days if the banks are steep i.e., $\geq 5\%$).

Compliance with the *Tennessee Construction Individual Permit* is required until the entire site is fully stable, a letter requesting termination is submitted to the division and the permit coverage is terminated. To bring this site into compliance, the issues noted above are to be corrected within seven (7) days of receiving this letter.

Sedimentation of surface water degrades water quality by adversely altering the biological, physical and chemical properties of the waterway. For example, soil particles can increase water temperature, reduce plant growth, lower dissolved oxygen and cover spawning areas, aquatic insects and oxygen producing plants. Therefore, it's imperative that construction related activities install and maintain Best Management Practices to eliminate sediment discharges into receiving streams.

Required Actions:

- Temporarily or permanently stabilize all areas that are inactive, including the banks of the sediment basins and drainage channels. Please note that spreading grass seed on these areas does not constitute the areas to be stabilized;
- Cease applying PAM to areas that do not drain into a sediment basin or sediment trap; and remove the PAM from the areas shown in the enclosed photo document.
- By January 11, 2016, submit a detailed written response and photo record to this office describing corrective actions taken and measures implemented to prevent the recurrence of the issues that were noted during the inspection. The photo record should also document the removal of the PAM and the condition of areas after the PAM has been removed.

We appreciate your prompt attention and cooperation in this matter. If there are factors regarding this matter that need further discussion, please contact Steve Owens at (901) 371-3029 or steve.r.owens@tn.gov.

Sincerely,



Joellyn Brazile, CPESC
Environmental Program Manager
Division of Water Resources
Memphis Environmental Field Office

Enclosures: Photo Document, Compliance Inspection Report and ICIS NPDES Facilities
Inspection Report

cc: TDEC/DWR/MEFO - file

ec: TDEC/DWR/NCO - Enforcement and Compliance Section
Memphis MS4

Kim Elloriga, Shelby Farms Park Conservancy; KElloriaga@shelbyfarmspark.org

Jason Acuff; Scott Contractors; Jason@scottcontractors.com

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville TN 37243

1-888-891-8332 (TDEC)

Compliance Inspection for Individual NPDES Permit for Stormwater Discharges from Construction Activities

Site/Project Name: Shelby Farms Heart of the Park			NPDES Tracking Number: TN0081663	
			Date Coverage was Issued 26-AUG-14	
Street Address or Location: 500 North Pine Lake Drive			Start date: 15-AUG-14	
			Estimated end date: Sept. 2015	
Site Description: Shelby Farms Park			Latitude (dd.dddd): 35.1387	
			Longitude (-dd.dddd): -89.8325	
County(ies): Shelby	EFO: Memphis	MS4 Jurisdiction: Memphis	Acres Disturbed: 270	
			Total Acres: 4,500	
Name of Permittee (Developer/Operator): Shelby Farms Park Conservancy				
Name of Official Contact: Laura Adams		Email: lwadams@shelbyfarmspark.org		Contact Phone: 901-767-7275
Address: 500 North Pine Lake Drive		City: Memphis		State: TN Zip: 38134

General Comments:


During the inspection performed on December 11, 2015, it was observed that:

Although a large portion of the site was stabilized or in the process of becoming stabilized, numerous areas around the construction site that appeared to be inactive needed to be stabilized. Specifically, the drainage areas along Farm Road and the banks of the sediment basins (Photo 1). Measures to stabilize the site should be initiated as soon as possible. Temporary or permanent soil stabilization at the construction site must be completed no later than 14 days after the construction activity at that portion of the site has temporarily or permanently ceased (7 days if the banks are steep i.e., $\geq 35\%$).

Water from the Lot 10 sediment basin was being reused as irrigation water for part of the 83 ac. drainage area associated with the basin. Reusing detained stormwater in this manner is a great way to reduce the volume of water to be treated in the sediment basin and is a sustainable approach to provide favorable conditions for stabilization with vegetation.

Rills and gullies had formed in numerous locations around the construction site, specifically in drainage areas along Farm Road, and are in need of temporary or permanent stabilization measures. An example of gully formation was noted near the driveway adjacent to outfall SW5 (Photo 2). Water velocity needs to be reduced so that rill and gully formation is prevented.

Polyacrylamide (PAM) was being used to aid in the sedimentation of sediment contained in the discharged stormwater from the sediment basins. PAM had been applied directly to a rock check dam (Photo 3) downgradient of the Lot 10 sediment basin outlet. PAM was also applied directly into a channel at two locations near outfall SW9 (Photos 4-6). Residual PAM was observed on the ground above the drainage culvert downgradient of outfall SW9 (Photo 6). PAM was also applied to the channel at this location. Please note that this method of application is prohibited in the *TN Erosion Prevention and Sediment Control Handbook* as it increases the potential of discharging chemical flocculant off-site, which could impact waters of the state and promotes settling of sediment off-site, which is not acceptable. Areas where PAM is applied must drain to a sediment basin or trap for final settling prior to discharging from the site.

Routine <input type="checkbox"/>	Comprehensive <input checked="" type="checkbox"/>	Complaint <input type="checkbox"/>	Follow Up <input type="checkbox"/>	Termination <input type="checkbox"/>
On-Site Contact (if available)				
On-Site Contact Name (Print):		On-Site Contact Title:	Signature:	Date:
TDEC Personnel/Information			EFO: Name and Address	
Inspector's Name (Print):		Signature:	Date: 12/11/2015	Memphis Environmental Field Office 8383 Wolf Lake Drive Bartlett, TN 38133
Steve Owens			Time:	



TDEC - Division of Water Resources
Memphis Field Office

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID:	TN0081663	Facility Site Name	Shelby Farms Park, Heart of the Park		
		Address	500 North Pine lake Drive		
Permit Eff. Date:	Aug 26, 2014	Permit Exp Date:	05/23/2016	SIC Code:	

Compliance Monitoring Information

Compliance Monitoring Activity Name	Stormwater Construction Non-Sampling				
	* If Bio Monitoring is selected above, select the method used:				
Compliance Monitoring Activity	Evaluation				

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm):	12/11/2015 11:30	Exit Date/Time (mm/dd/yyyy hh:mm):	12/11/2015 1:30
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Facility Representatives

Jason Acuff, (901) 386-1981	Laura Adams, Owner/Developer, (901) 767-7275
On-Site Representative(s) Title, Phone Number	Responsible Official(s), Title, Phone Number

Statute and Section Information

Federal Statute:	CWA - Clean Water Act	State Statute:	Tennessee Water Quality Control Act
Programs:	NPDES-Stormwater Construction		

Compliance Monitoring Reason:	Core Program				
Compliance Monitoring Agency Type:	State	Agency Name:	TDEC - DWR		
Did EPA assist/ Inspection?	No	Time Physically conducting activity: Days:	1	Hours:	
Inspection Type:	State	Compliance Monitoring Action Outcome:			
Lead Agency:	State	Compliance Monitoring Rating Code:	Unrated		
If Joint Inspection, what was the purpose of the other party?					

Areas Evaluated During Inspection (Check only those areas evaluated)

<input type="checkbox"/> Permit	<input type="checkbox"/> Self - Compliance Program	<input type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> Records / Records	<input type="checkbox"/> Compliance Schedule	<input checked="" type="checkbox"/> Pollution Prevention
<input type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input checked="" type="checkbox"/> Storm Water
<input checked="" type="checkbox"/> Effluent / Receiving Waters	<input type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow
<input type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling / Disposal	<input type="checkbox"/> Sanitary Sewer Overflow

Compliance Monitoring Summary

See attached inspection report and/or letter.

EPA and State Representatives

	TDEC-DWR / Memphis/ (901) 371-3000	12/11/2015
Inspector's Signature	Agency / Office / Phone	Date
	TDEC-DWR / Memphis/ (901) 371-3000	12/11/2015
Manager's Signature	Agency / Office / Phone	Date

(Note: This form can only be printed to an XPS document, then saved for later use.)